Amendments to the claims:

1. (currently amended) A digital electronic method for increasing the calculation accuracy in non-linear functions, comprising the steps of:

inputting, for processing, into a first multiplexing device of an electronic data processing device with $2^F = f$ inputs, each with m locations, a value of a generally non-linear function which is present as a number and which serves as an input word together with a respective coded control word $_f$ having the input format

$$EF_f = S\ Ü1_f\ M_f\ Al_f$$

with the point being at an undetermined location, wherein S represents the plus or minus sign, $Ü1_f$ the locations with the highest values ~~which likely can never be used~~ are used only in case of overflow, M_f the locations with the uniform width m and $A1_f$ the locations with the lowest value, which ~~cannot be~~ are not used, and the index "$_f$" is the coded control word of the length F,

transforming said value ~~is transformed~~ in the data processing device to an intermediate format

$$\cancel{ZF = S\ ÜZ_e\ A2_e}$$

$$ZF = s\ Ü2_c\ B_cA2_c$$

with (~~m-1~~) (m+1) locations and a fixed point location, (fixed point representation) wherein the locations $Ü1_f$ and $Ü2_c$, that is the locations 2_c of the overflow block Ü, are checked in an overflow device for overflow and which, upon occurrence of a fixed location, ~~is~~ are capable of generating an alarm, and wherein the lower value locations $A1_f$ and ~~$A2_e$~~ $A2_c$ are cut off in an electronic cut-off device (A),

dividing the number range which is represented at the output of the first multiplex device by the intermediate format ZF into C intervals of partially different sizes which cover the whole number range of ZF without overlapping and without gaps, and dividing the intermediate format ZF into a range K_c for coding and a range G_c of low value locations ~~wherein both ranges may overlap~~.

2. (currently amended) A digital electronic system for increasing the calculation accuracy in non-linear functions, comprising:

a first multiplexing device (M1) with 2^F inputs for inputting arbitrary input formats (which ~~can be~~ are numbered) with a certain word width m and having a fixed point at different locations,

a further coded control input by way of which the numbered input formats EF_f ~~can be~~ are addressed,

an output with a uniform intermediate format ZF also of predetermined word width wherein the fixed point is only at a predetermined location,

an overflow device (Ü) for receiving the highest value locations $Ü1_f$ of the input format EF_f ~~which are likely never set and also~~ to which the higher value locations $Ü2_c$ of the intermediate word ZF_m at the multiplexing device (M1) which must be checked for overflow are added and which are interrogated for locations different from zero in order to provide an alarm if set locations are found,

a coding device K, in which a coding range K_c is generated from the partial range B_c to be coded of the intermediate format ZF_m,

a cut-off device (A) in which the lowest value locations $A1_f$ and the low value locations $A2_c$ are eliminated from further processing, and

a second multiplexing device M2 in which the coded range SK_c which is provided with a sign and the attached uncoded range G_c of the low value locations in the intermediate format ZF are transformed into a predetermined output format AF.

3. (original) A digital electronic system according to claim 2, wherein said overflow device, said coding device and said cutoff device consist of logic components.

4. (original) A digital electronic system according to claim 3, wherein said system includes one of a specific chip and a specific set of chips.

5. (new) A method according to claim 1, comprising the following additional steps: performing the coding K_c in an electronic coding device (K) from a partial coding range B_c, attaching the lower value locations G_c to the coding SK_c, and performing in a second multiplexing device (M2) with C inputs of the width of the output format AF electronically the transformation $K_cG_c \rightarrow KG$, whereby a uniform output formal AF = SK is provided.